RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/723,003A
Source: IFW16
Date Processed by STIC: 01/25/2007

ENTERED

IFW16

RAW SEQUENCE LISTING DATE: 01/25/2007
PATENT APPLICATION: **US/10/723,003A** TIME: 14:46:02

Input Set : **A:\47630301.txt**
Output Set: **N:\CRF4\01252007\J723003A.raw**

<110> APPLICANT: MA, Jing
GUO, Yajun
<120> TITLE OF INVENTION: PREPARATION AND APPLICATION OF
ANTI-TUMOR BIFUNCTIONAL FUSION PROTEINS
<130> FILE REFERENCE: 047630-0301
<140> CURRENT APPLICATION NUMBER: US 10/723,003A
<141> CURRENT FILING DATE: 2003-11-26
<150> PRIOR APPLICATION NUMBER: CN 2003101199300
<151> PRIOR FILING DATE: 2003-11-25
<150> PRIOR APPLICATION NUMBER: CN 031292909
<151> PRIOR FILING DATE: 2003-06-13
<160> NUMBER OF SEQ ID NOS: 70
<170> SOFTWARE: FastSEQ for Windows Version 4.0
<210> SEQ ID NO: 1
<211> LENGTH: 546
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 1
atgacagtgc tggcgccagc ctggagccca acaacctatc tcctcctgct gctgctgctg 60
agctcgggac tcagtgggac ccaggactgc tccttccaac acagccccat ctcctccgac 120
ttcgctgtca aaatccgtga gctgtctgac tacctgcttc aagattaccc agtcaccgtg 180
gcctccaacc tgcaggacga ggagctctgc gggggcctct ggcggctggt cctggcacag 240
cgctggatgg agcggctcaa gactgtcgct gggtccaaga tgcaaggctt gctggagcgc 300
gtgaacacgg agatacactt tgtcaccaaa tgtgcctttc agcccccccc cagctgtctt 360
cgcttcgtcc agaccaacat ctcccgcctc ctgcaggaga cctccgagca gctggtggcg 420
ctgaagccct ggatcactcg ccagaacttc tcccggtgcc tggagctgca gtgtcagccc 480
gactcctcaa ccctgccacc cccatggagt ccccggcccc tggaggccac agccccgaca 540
gccccg 546
<210> SEQ ID NO: 2
<211> LENGTH: 182
<212> TYPE: PRT
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 2
Met Thr Val Leu Ala Pro Ala Trp Ser Pro Thr Thr Tyr Leu Leu Leu
1 5 10 15
Leu Leu Leu Leu Ser Ser Gly Leu Ser Gly Thr Gln Asp Cys Ser Phe
20 25 30
Gln His Ser Pro Ile Ser Ser Asp Phe Ala Val Lys Ile Arg Glu Leu
35 40 45
Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val Thr Val Ala Ser Asn Leu
50 55 60
Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp Arg Leu Val Leu Ala Gln
65 70 75 80

RAW SEQUENCE LISTING DATE: 01/25/2007
PATENT APPLICATION: US/10/723,003A TIME: 14:46:02

Input Set : A:\47630301.txt
Output Set: N:\CRF4\01252007\J723003A.raw

Arg Trp Met Glu Arg Leu Lys Thr Val Ala Gly Ser Lys Met Gln Gly
85 90 95
Leu Leu Glu Arg Val Asn Thr Glu Ile His Phe Val Thr Lys Cys Ala
100 105 110
Phe Gln Pro Pro Pro Ser Cys Leu Arg Phe Val Gln Thr Asn Ile Ser
115 120 125
Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu Val Ala Leu Lys Pro Trp
130 135 140
Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu Glu Leu Gln Cys Gln Pro
145 150 155 160
Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser Pro Arg Pro Leu Glu Ala
165 170 175
Thr Ala Pro Thr Ala Pro
180

<210> SEQ ID NO: 3
<211> LENGTH: 1242
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic Construct
<400> SEQUENCE: 3
atgacagtgc tggcgccagc ctggagccca acaacctatc tcctcctgct gctgctgctg 60
agctcgggac tcagtgggac ccaggactgc tccttccaac acagccccat ctcctccgac 120
ttcgctgtca aaatccgtga gctgtctgac tacctgcttc aagattaccc agtcaccgtg 180
gcctccaacc tgcaggacga ggagctctgc gggggcctct ggcggctggt cctggcacag 240
cgctggatgg agcggctcaa gactgtcgct gggtccaaga tgcaaggctt gctggagcgc 300
gtgaacacgg agatacactt tgtcaccaaa tgtgcctttc agcccccccc cagctgtctt 360
cgcttcgtcc agaccaacat ctcccgcctc ctgcaggaga cctccgagca gctggtggcg 420
ctgaagccct ggatcactcg ccagaacttc tcccggtgcc tggagctgca gtgtcagccc 480
gactcctcaa ccctgccacc cccatggagt ccccggcccc tggaggccac agccccgaca 540
gccccggagc ccaaatcttg tgacaaaact cacacatgcc caccgtgccc agcacctgaa 600
ctcctggggg gaccgtcagt cttcctcttc cccccaaaac ccaaggacac cctcatgatc 660
tcccggaccc ctgaggtcac atgcgtggtg gtggacgtga gccacgaaga ccctgaggtc 720
aagttcaact ggtacgtgga cggcgtggag gtgcataatg ccaagacaaa gccgcgggag 780
gagcagtaca acagcacgta ccgggtggtc tgcgtcctca ccgtcctgca ccaggactgg 840
ctgaatggca aggagtacaa gtgcaaggtc tccaacaaag ccctcccagc ccccatcgag 900
aaaaccatct ccaaagccaa agggcagccc cgagaaccac aggtgtacac cctgccccca 960
tcccgggatg agctgaccaa gaaccaggtc agcctgacct gcctggtcaa aggcttctat 1020
cccagcgaca tcgccgtgga gtgggagagc aatgggcagc cggagaacaa ctacaagacc 1080
acgcctcccg tgctggactc cgacggctcc ttcttcctct acagcaagct caccgtggac 1140
aagagcaggt ggcagcaggg gaacgtcttc tcatgctccg tgatgcatga ggctctgcac 1200
aaccactaca cgcagaagag cctctccctg tctcccggta aa 1242

<210> SEQ ID NO: 4
<211> LENGTH: 414
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic Construct
<400> SEQUENCE: 4

RAW SEQUENCE LISTING DATE: 01/25/2007
PATENT APPLICATION: **US/10/723,003A** TIME: 14:46:02

Input Set : **A:\47630301.txt**
Output Set: **N:\CRF4\01252007\J723003A.raw**

```
114 Met Thr Val Leu Ala Pro Ala Trp Ser Pro Thr Thr Tyr Leu Leu Leu
115  1               5                  10                  15
116 Leu Leu Leu Leu Ser Ser Gly Leu Ser Gly Thr Gln Asp Cys Ser Phe
117             20                  25                  30
118 Gln His Ser Pro Ile Ser Ser Asp Phe Ala Val Lys Ile Arg Glu Leu
119         35                  40                  45
120 Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val Thr Val Ala Ser Asn Leu
121     50                  55                  60
122 Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp Arg Leu Val Leu Ala Gln
123 65                  70                  75                  80
124 Arg Trp Met Glu Arg Leu Lys Thr Val Ala Gly Ser Lys Met Gln Gly
125                 85                  90                  95
126 Leu Leu Glu Arg Val Asn Thr Glu Ile His Phe Val Thr Lys Cys Ala
127             100                 105                 110
128 Phe Gln Pro Pro Pro Ser Cys Leu Arg Phe Val Gln Thr Asn Ile Ser
129         115                 120                 125
130 Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu Val Ala Leu Lys Pro Trp
131     130                 135                 140
132 Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu Glu Leu Gln Cys Gln Pro
133 145                 150                 155                 160
134 Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser Pro Arg Pro Leu Glu Ala
135                 165                 170                 175
136 Thr Ala Pro Thr Ala Pro Glu Pro Lys Ser Cys Asp Lys Thr His Thr
137             180                 185                 190
138 Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
139         195                 200                 205
140 Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
141     210                 215                 220
142 Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
143 225                 230                 235                 240
144 Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
145                 245                 250                 255
146 Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
147             260                 265                 270
148 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
149         275                 280                 285
150 Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
151     290                 295                 300
152 Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
153 305                 310                 315                 320
154 Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
155                 325                 330                 335
156 Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
157             340                 345                 350
158 Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp
159         355                 360                 365
160 Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
161     370                 375                 380
162 Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
```

RAW SEQUENCE LISTING DATE: 01/25/2007
PATENT APPLICATION: **US/10/723,003A** TIME: 14:46:02

Input Set : **A:\47630301.txt**
Output Set: **N:\CRF4\01252007\J723003A.raw**

385 390 395 400
Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
405 410

<210> SEQ ID NO: 5
<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic Construct
<400> SEQUENCE: 5
ggcggtggag gctctggtgg aggcggttca ggaggcggtg gatct 45

<210> SEQ ID NO: 6
<211> LENGTH: 15
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic Construct
<400> SEQUENCE: 6
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> SEQ ID NO: 7
<211> LENGTH: 426
<212> TYPE: DNA
<213> ORGANISM: Mus musculus
<400> SEQUENCE: 7
atcgccgcca ccatggaatg gagttggata tttctctttc tcctgtcagg aactgcaggt 60
gtccactctg aggtccagct gcagcagtct ggacctgagc tggtaaagcc tggggcttca 120
gtgaagatgt cctgcaaggc ttctggatac acattcacta gctatgttat gcactgggtg 180
aagcagaagc ctgggcaggg ccttgactgg attggatata ttgttcctta caatgatggc 240
actaagtaca atgagaagtt caaaggcaag gccacactga cttcagacaa atcctccagc 300
acagcctaca tggagctcag cagactgacc tctgaggact ctgcggtcta ttattgtgtc 360
tacggtagta ggtacgactg gtatttagat gtctggggcg cagggaccac ggtcaccgtc 420
tcctca 426

<210> SEQ ID NO: 8
<211> LENGTH: 138
<212> TYPE: PRT
<213> ORGANISM: Mus musculus
<400> SEQUENCE: 8
Met Glu Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly
1 5 10 15
Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
20 25 30
Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45
Thr Ser Tyr Val Met His Trp Val Lys Gln Lys Pro Gly Gln Gly Leu
50 55 60
Asp Trp Ile Gly Tyr Ile Val Pro Tyr Asn Asp Gly Thr Lys Tyr Asn
65 70 75 80
Glu Lys Phe Lys Gly Lys Ala Thr Leu Thr Ser Asp Lys Ser Ser Ser

RAW SEQUENCE LISTING DATE: 01/25/2007
PATENT APPLICATION: US/10/723,003A TIME: 14:46:02

Input Set : A:\47630301.txt
Output Set: N:\CRF4\01252007\J723003A.raw

```
224                 85                  90                  95
225 Thr Ala Tyr Met Glu Leu Ser Arg Leu Thr Ser Glu Asp Ser Ala Val
226             100                 105                 110
227 Tyr Tyr Cys Val Tyr Gly Ser Arg Tyr Asp Trp Tyr Leu Asp Val Trp
228         115                 120                 125
229 Gly Ala Gly Thr Thr Val Thr Val Ser Ser
230     130                 135
233 <210> SEQ ID NO: 9
234 <211> LENGTH: 465
235 <212> TYPE: DNA
236 <213> ORGANISM: Mus musculus
238 <400> SEQUENCE: 9
239 atcatcacca gaacagctta cgagcagacc gccagacagc tcacagggat caagcttgcc 60
240 gccaccatgg aatcacagac tcaggtcttc ctctccctgc tgctctgggt atctggtacc 120
241 tgtgggaaca ttatgatgac acagtcgcca tcatctctgg ctgtgtctgc aggagaaaag 180
242 gtcactatga gctgtaagtc cagtcaaagt gttttataca gttcaaatca gaagaactac 240
243 ttggcctggt accagcagaa accagggcag tctcctaaac tgctgatcta ctgggcatcc 300
244 actagggaat ctggtgtccc tgatcgcttc acaggcagtg gatctgggac agattttact 360
245 cttaccatca gcagtgtaca agctgaagac ctggcagttt attactgtca tcaatatttc 420
246 tcctcataca cgttcggagg ggggaccaag ctggaaataa agcgg                 465
248 <210> SEQ ID NO: 10
249 <211> LENGTH: 133
250 <212> TYPE: PRT
251 <213> ORGANISM: Mus musculus
253 <400> SEQUENCE: 10
254 Met Glu Ser Gln Thr Gln Val Phe Leu Ser Leu Leu Leu Trp Val Ser
255  1               5                  10                  15
256 Gly Thr Cys Gly Asn Ile Met Met Thr Gln Ser Pro Ser Ser Leu Ala
257             20                  25                  30
258 Val Ser Ala Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser
259         35                  40                  45
260 Val Leu Tyr Ser Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln
261     50                  55                  60
262 Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
263 65                  70                  75                  80
264 Glu Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp
265                 85                  90                  95
266 Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr
267             100                 105                 110
268 Tyr Cys His Gln Tyr Phe Ser Ser Tyr Thr Phe Gly Gly Gly Thr Lys
269         115                 120                 125
270 Leu Glu Ile Lys Arg
271     130
274 <210> SEQ ID NO: 11
275 <211> LENGTH: 2021
276 <212> TYPE: DNA
277 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
280 <223> OTHER INFORMATION: Synthetic Construct
```

VERIFICATION SUMMARY DATE: 01/25/2007
PATENT APPLICATION: **US/10/723,003A** TIME: 14:46:03

Input Set : **A:\47630301.txt**
Output Set: **N:\CRF4\01252007\J723003A.raw**